First Year Progress Report Dr. Arthur V. Douglas, P.I. CPO CPPA NOAA Award NA07OAR4310217 Covering 9 Month Period of June 1, 2007- February 29, 2008

The Warm Pools of the Western Caribbean and Eastern Tropical Pacific: Their influence on the predictability of intraseasonal rainfall regimes in Mexico and basin wide tropical storm activity.

Figures:

Figure 1. Index of Cross Equatorial Flow as measured by the pressure gradient from Easter Island, Chile to Liberia, Costa Rica. This daily index has been extended back to 1966.

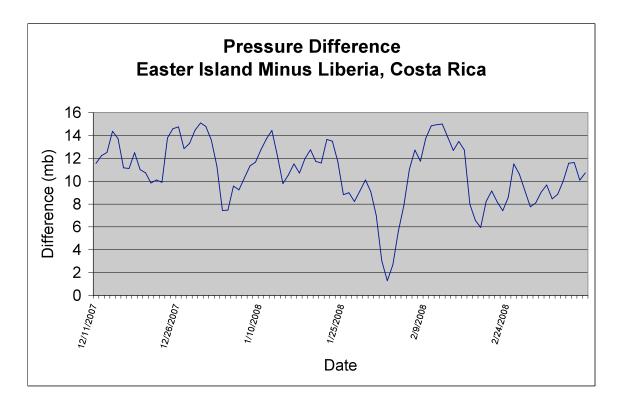


Figure 2. Location map and seasonal statistics (monsoon start and end dates and mean wet spell) for four distinct monsoon climate regions in Mexico.

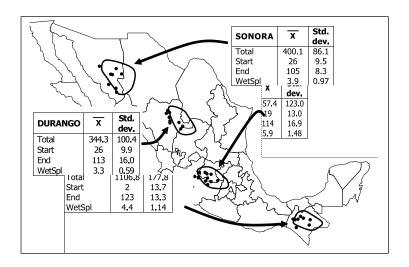


Figure 3. Results of the Classification Tree approach to predicting monsoon rainfall in northern Mexico (North Index) and southern Mexico (South Index). Prediction in the north utilizes a number of spring predictors while prediction in the south is tied to concurrent summer predictors. Success of hindcast forecasts is given in the table and a breakdown by decade is provided for the two monsoon regions.

